

Title (en)
Air conditioner

Title (de)
Klimaanlage

Title (fr)
Climatiseur

Publication
EP 2437009 B1 20170927 (EN)

Application
EP 11155873 A 20110224

Priority
• JP 2010218179 A 20100929
• JP 2010218187 A 20100929

Abstract (en)
[origin: EP2437009A2] An air conditioner has a refrigerating cycle in which a refrigerant flows through a compressor 6, a four-way valve 8, an indoor heat exchanger 16, an expansion valve 12, an outdoor heat exchanger 14, and the four-way valve 8 in this order during heating, and also has a heat storage tank 32 that accommodates a heat storage material 36 for storing therein heat generated by the compressor 6 and a heat storage heat exchanger 34,. The air conditioner includes a heat storage bypass circuit for connecting a refrigerant pipe between the indoor heat exchanger 16 and the expansion valve 12 and a refrigerant pipe between the four-way valve 8 and an inlet port defined in the compressor 6, a defrosting bypass circuit for connecting a refrigerant pipe between the expansion valve 12 and the outdoor heat exchanger 16 and a refrigerant pipe between an outlet port defined in the compressor 6 and the four-way valve 8, and a heat storage two-way valve 42 provided in the heat storage bypass circuit. Also, a normal heating mode and a quick heating mode are provided, and a warm wind is blown out more quickly in the quick heating mode than in the normal heating mode.

IPC 8 full level
F25B 13/00 (2006.01); **F25B 31/00** (2006.01); **F25B 47/02** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)
F25B 31/006 (2013.01); **F25B 47/022** (2013.01); **F25B 49/022** (2013.01); **F25B 2313/0293** (2013.01); **F25B 2313/0314** (2013.01); **F25B 2313/0315** (2013.01); **F25B 2400/04** (2013.01); **F25B 2400/05** (2013.01); **F25B 2400/24** (2013.01); **F25B 2600/01** (2013.01); **F25B 2600/0253** (2013.01); **F25B 2600/2501** (2013.01); **F25B 2700/2106** (2013.01); **F25B 2700/2111** (2013.01); **Y02B 30/70** (2013.01)

Cited by
EP2894419A1; FR3016206A1; US9994238B2; US10953725B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2437009 A2 20120404; **EP 2437009 A3 20130626**; **EP 2437009 B1 20170927**; CN 102434914 A 20120502; CN 102434914 B 20151216

DOCDB simple family (application)
EP 11155873 A 20110224; CN 201110054214 A 20110304